

**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION II**

DATE: February 6, 2004

SUBJECT: National Remedy Review Board Recommendations -
Cornell-Dubilier Electronics Superfund Site

FROM: John S. Frisco, Manager
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TO: JoAnn Griffith, Chair
National Remedy Review Board

I am writing in response to your memorandum, dated October 8, 2003, providing the advisory recommendations of the National Remedy Review Board (NRRB or board) in connection with its review of the proposed remedial action for Operable Unit 2 at the Cornell-Dubilier Electronics Superfund Site in South Plainfield, New Jersey.

Let me first express the region's appreciation to the board for both its thorough review and thoughtful comments on the proposed remedial action for the site at the August 26, 2003 meeting. Our specific responses to the board's advisory recommendations are provided below. For convenience purposes, each recommendation is presented in the order identified in your memorandum followed by our response.

Responses to NRRB Advisory Recommendations

Comment 1. The region includes a multilayer cap as an element of several soil cleanup alternatives. However, the hardscape (i.e., that part of the site consisting of structures, parking areas, and walkways, made with hard materials) that may be included in the site redevelopment plan could be designed to offer performance characteristics similar to those of a cap. The board recommends that the region coordinate the cleanup plan with the redevelopment efforts to assess the extent to which hardscape could be used in place of full site capping. The board also recommends that the region develop performance criteria for the hardscaping and cap that will prevent vapor intrusion into any buildings constructed on the site.

Response 1. The region acknowledges the board comment and agrees with the board recommendations. As discussed at the meeting, the region has been working in a collaborative effort with the Borough of South Plainfield, potentially responsible parties (PRPs), and the designated redeveloper for the Hamilton Industrial Park to better understand the proposed redevelopment plans for the industrial park and its future use. The region intends to continue to work with these parties in order to coordinate the cleanup plan with the redevelopment efforts and assess the extent to which hardscape (i.e., that part of the site consisting of structures, parking areas and walkways, made with hard materials) could be used in place of capping. Once the redevelopment plans are finalized, we will be able to more accurately determine the amount of hardscaping to be utilized along with the associated cost savings.

The region acknowledges that vapor intrusion may be a concern for buildings that would be constructed at the site. However, since vapor intrusion data has not been collected, the region does not recommend the inclusion of performance criteria for the hardscape and cap to prevent vapor intrusion into any buildings. Instead, provisions will be included in each of the alternatives that would require implementation of a vapor mitigation system for the on-site buildings if such additional measures are determined to be necessary.

Comment 2. For the soil alternatives, the board notes that operation and maintenance (O&M) cost estimates are identical, presumably based solely on a percentage of the cap cost. The board recommends that the region refine O&M cost estimates to be alternative- and time frame-specific for Alternatives S-3 through S-6.

Response 2. The region acknowledges the board comment and agrees with the associated recommendation. The operation and maintenance cost estimates were calculated based on a percentage of the cap capital cost. The region will refine the O&M cost estimates to be alternative- and time frame-specific for the affected remedial alternatives and will present this information in the decision documents for the site.

Comment 3. Relocation costs for the building alternatives were not included in the information presented to the board. The board recommends that the region develop and include in the feasibility study and other decision documents estimates for business relocation costs for Alternatives B-2 and B-3.

Response 3. The region acknowledges the board comment and agrees with the board recommendation. The region has developed cost estimates for business relocation activities under Alternatives B-2 and B-3. The estimated cost of relocating the businesses for each alternative is \$1.2 million. The feasibility study will be revised to reflect this information and it will also be included in the site decision documents.

Comment 4. As presented to the board, the preferred soil alternative (S-3) is more costly than several other alternatives. A combination of excavation and disposal, volatile organic compound removal, and soil stabilization may provide cost savings and be protective. The board recommends that the region evaluate a combination alternative (S-3, S-4, and S-5) that may provide cost savings while also allowing the flexibility necessary to implement redevelopment in a timely manner.

Response 4. The region evaluated the board recommendation and developed a new alternative representing a combination of actions. More specifically, Alternatives S-4 and S-5 will be replaced by a single alternative consisting of the following components: installation of a soil vapor extraction system; solidification of soil contaminated with polychlorinated biphenyls (PCBs) greater than 500 ppm; excavation of the capacitor disposal area; installation of a cap; and implementation of institutional controls.

Comment 5. The board notes that the region's preferred alternative involves the removal and off-site disposal of 152,000 cubic yards of "principal threat" waste. Information presented to

the board indicates that approximately 80 percent of this volume is 500 ppm or greater PCB-contaminated waste. The volume of soil proposed to be removed appears to be driven by the PCB contamination. Given that approximately 20 percent of the volume is non-PCB waste (e.g., metals), the board recommends that the region review and evaluate appropriate cleanup levels for metals and whether doing so would reduce waste volume.

Response 5. As indicated in the board comment, the remediation of the site is primarily driven by PCB contamination, although volatile organic compound (VOC) contamination, especially in areas also containing PCBs, was also a major factor. The region re-evaluated whether the nature and extent of metals contamination warranted consideration as a principle threat waste and concluded that it did not. Eliminating the cleanup criteria for metals would reduce the volume of soil requiring remediation from an estimated 152,000 cubic yards to 107,000 cubic yards under Alternatives S-3, S-4, S-5 and S-6. Reducing the volume of soil to be treated by approximately 30 percent would significantly lower the associated costs of these alternatives. Since each of the soil alternatives includes the installation of a cap over the property and the implementation of institutional controls to prevent direct contact with the contaminated soils, the region does not believe that treatment for metals is essential to protect human health and the environment. Further, significant cost savings would result. The region intends to revise the cost estimates for the affected alternatives to reflect this modified approach.

Comment 6. The board considers excavation and off-site disposal to be viable technologies at this site, and understands that excavation of shallow soil would be intended to protect future workers, while deeper excavation would be intended to protect ground water. However, the board notes that there is uncertainty surrounding the OU3 groundwater study (that is, the extent to which contamination removal is necessary to protect ground water). Therefore, the board recommends that the region evaluate the potential cost savings of setting the depth of excavation at a level to protect future workers if the OU3 remedial investigation indicates that any remaining deeper soil contamination would not affect a groundwater remedy. If significant cost savings would result, the board recommends that the region include in its proposed remedy a contingency to that effect. For example, an alternative excavation depth could be one foot below the depth required to install a sewer line. This contingency could potentially result in a significant cost savings due to reductions in the volume of soil requiring excavation, while still protecting human health and the environment and allowing redevelopment to occur.

Response 6. As indicated in the board comment, the OU3 groundwater study is ongoing. Sampling results from on-site monitoring wells indicate that the ground water is seriously compromised by VOCs from the site; further, PCB levels in several monitoring wells are also highly elevated. It is anticipated that the RI for OU3 will be completed during the summer of 2004. At that time, the region will have a better understanding of the nature and extent of the groundwater contamination. The region considers the “principal threat” component of the soil contamination to be a major driver in remedy considerations, and believes addressing the sources of groundwater contamination to be essential to the overall groundwater strategy.

The region estimates that setting the depth of excavation at a level to protect future workers (e.g., 10 feet below grade) vs. bedrock would reduce the volume of soil to be excavated by about

22,150 cubic yards. Since the depth to bedrock in the developed portion of the site is about 8.5 feet, most of the estimated 22,150 cubic yards of soil to remain under such an approach would be on the undeveloped portion of the site. Unfortunately, data collected during the RI revealed that the highest concentrations of contaminants were found on the undeveloped portion of the site, including at lower depths. Further, aerial photographs and test pits excavated during the RI indicate that the dumping of capacitors and other debris generally occurred in this same area. Although each of the soil alternatives does include the excavation of the capacitor disposal material, limiting the depth of excavation could potentially leave highly-contaminated soils considered source material outside of the capacitor disposal areas which may impact the groundwater remedy. The region does not believe it is appropriate to leave such material on the site and instead would prefer to excavate down to bedrock. However, if data becomes available through future studies indicating a lesser excavation depth to be more appropriate, the region will consider such information at that time along with any associated changes to the OU-2 remedy.

In closing, I again want to thank the board for its very comprehensive review of the information presented by the region involving the remediation of the facility soils and buildings (OU2) at the Cornell-Dubilier Electronics site. The board's valuable input will help ensure that the remedy is selected, designed and constructed in a cost-effective manner.

If you have any questions concerning this correspondence, please do not hesitate to contact me.